

# Attenuation Values Used in State VI Guidance

State	Attenuation Coefficients				
	Ground Water	Shallow Soil Gas	Deep Soil Gas	BTEX	Crawl Spaces
Alaska	0.001	0.1	0.01	NA	NA
California	NA	0.01 – 0.002	Same as shallow	NA	0.002
Colorado	NA	0.1 (subslab)	NA	NA	1
Connecticut	0.001	0.001	NA	NA	NA
Indiana	NA	sub-slab = 0.1 soil gas = 0.01	0.01	NA	1
Louisiana	NA	NA	NA	NA	NA
Maine	NA	NA	NA	NA	NA
Massachusetts	Based on J&E model	NA	AN	Adjusted by 10x	NA
Michigan	Based on J&E model	0.02	0.002	NA	NA
Minnesota	NA	NA	NA	NA	NA
New Hampshire	Based on J&E model	0.02	0.02	Groundwater values adjusted by 10x	1
New Jersey	Based on J&E model	0.02	NA	0.002	1
New York	NA	NA	NA	NA	NA
Ohio	0.001	0.1	0.01	NA	NA
Oklahoma		0.1 (sub-slab)	0.1 (8 – 10 feet)	NA	1
Oregon	0.002	NA	NA	NA	NA
Pennsylvania	NA	0.01	NA	NA	NA
Washington	.001	0.1 (sub-slab)	0.01	Adjusted by 10x*	NA
EPA	.001	0.1 (sub-slab)	0.01	NA	NA

- if conditions suitable for biogradation

## References:

Alaska, California, Colorado, Connecticut, Indiana, Louisiana, Maine, Massachusetts, Michigan, Minnesota, New Hampshire, New Jersey, Ohio, Oklahoma, Oregon, Pennsylvania – Eklund, B., D. Folkes, J. Kabel and R. Farnum. 2007. *An Overview of State Approaches to Vapor Intrusion*. Air & Waste Management Association. EM February

Washington - Washington State Department of Ecology. October 2009. *Review Draft: Guidance for Evaluating Soil Vapor Intrusion in Washington State*. Toxics Cleanup Program.

<http://www.ecy.wa.gov/programs/tcp/policies/VaporIntrusion/VI%20guid%20rev5%20final%2010-9-09%20.pdf>

EPA, 2002 *Draft Guidance for Evaluating Vapor Intrusion Guidance to Indoor Air Pathway from Groundwater and Soils*. EPA530-F-02-052 U.S. Environmental Protection Agency. November